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(See inside cover)

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

PHOTOGRAPHIC INTERPRETATION REPORT

# SERPUKHOV SURFACE-TO-SURFACE MISSILE ENGINEERING RESEARCH/ TRAINING FACILITY USSR

~~Top Secret~~

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OCTOBER 1976

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| INSTALLATION OR ACTIVITY NAME | | | | | COUNTRY |
|---|---|---|---|---|---|
| Serpukhov Surface-to-Surface Missile Engineering Research/Training Facility | | | | | UR |
| UTM COORDINATES | GEOGRAPHIC COORDINATES | CATEGORY | BE NUMBER | COMIREX NO. | NIETB NO. |
| NA | NA | NA | NA | NA | NA |

MAP REFERENCE

SAC. USATC, Series 200, Sheet 0167-10, scale 1:200,000

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| | NEGATION DATE (If required) |
|---|---|
| | NA |
| NA | NPIC PROJECT 143451NC |

## ABSTRACT

1. Serpukhov Surface-to-Surface Missile Engineering Research/Training Facility was first associated with the Soviet Strategic Rocket Forces in February 1974 when a type IIIE (SS-13 ICBM) training silo was identified. Training activity associated with the SS-13 offensive missile system was first observed in June 1975.

2. This report provides a basic description of the facility, a chronology of activity observed at the training silo, a location map, two annotated photographs, a line drawing, and a dimensional table. The report is based on selected photography from February 1966 through July 1976.

## INTRODUCTION

3. This facility is believed to have been an air force training school through the mid-to-late 1960s. It was first directly associated with the Soviet Strategic Rocket Forces (SRF) in February 1974 when a type IIIE (SS-13 ICBM) training silo was identified within a triple-secured area of the facility. A review of photography of 1974 indicated that one of two obstacle courses completed in 1968 was in fact a typical SRF course, suggesting when this facility became associated with the SRF. Subsequently, the facility was targeted as the Serpukhov Surface-to-Surface Missile Engineering Research/Training Facility (Figure 1). The facility covers 182 acres and has over 60 buildings or structures.

## BASIC DESCRIPTION

4. For reporting purposes, the facility has been divided into three functional areas: a technical training and support area, a classroom and housing area, and a maintenance and storage area (Figure 2).

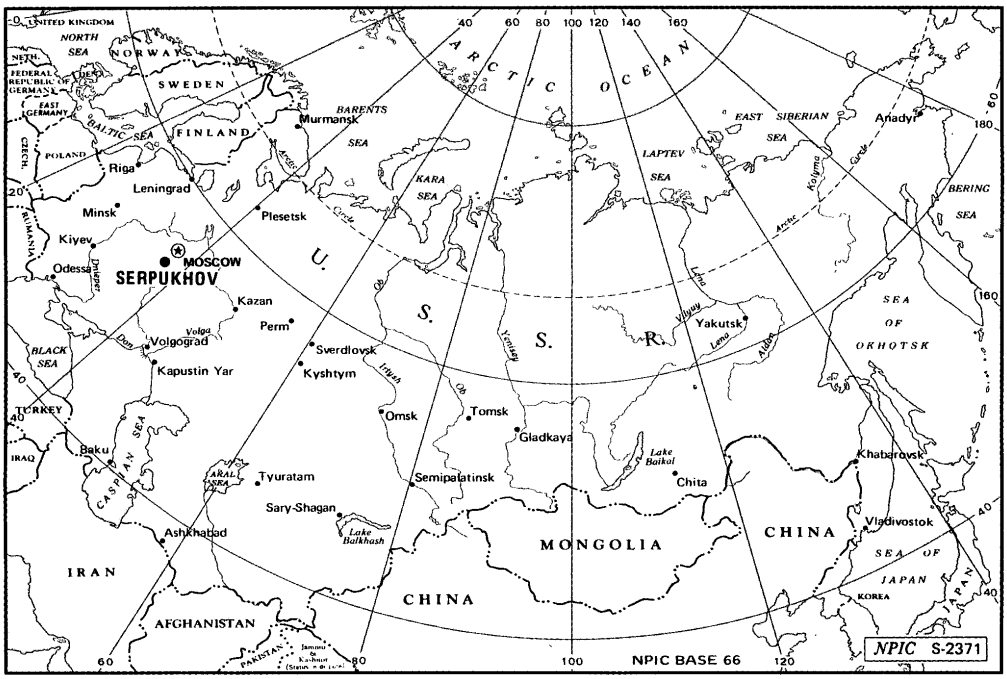


*FIGURE 1. LOCATION OF SERPUKHOV SSM ENGINEERING RESEARCH/TRAINING FACILITY, USSR*

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## Construction Activity

### Technical Training and Support Area

5. This area contains a type IIIE training silo, a high-bay checkout building, three 14-bay vehicle storage buildings, a large foundation for a new building, two clerestory buildings, and a support building; all of these structures are within a security wall and two fences.

6. The type IIIE training silo (item 22, Figure 2) was constructed atop a small hill that had been leveled for the silo. The south face of the hill is probably a concrete wall with a drop [redacted] 25X1
[redacted] Two doors (Figure 3) are at one end of this wall, and a large sloping apron extends from the south to the doors. These two doors provide access into a probable equipment storage room. 25X1

7. It is not believed that this silo is full depth, although no positive confirmation is possible because of a lack of usable photography during the construction of the silo. Unidentified construction activity was visible in March 1971 in the same location where in February 1974 the type IIIE training silo could be identified. The silo may be only [redacted] the height of the concrete wall on the south side of the hill. This dimension is compatible with the combined length of the SS-13 third stage and reentry vehicle. If this concept is correct, then the silo probably is involved only in reentry vehicle mating training. 25X1

8. The three vehicle storage buildings (items 20, 23, and 24, Figure 2), one of the two clerestory buildings (item 19, Figure 2), and the support building (item 18, Figure 2) were all complete when the facility was observed in 1968. The clerestory building probably functions as a receiving, inspection, and maintenance building.

9. The second clerestory building (item 25) was complete on photography [redacted] It was seen under construction for the first time in January 1974. This building is similar to payload handling buildings, one of which is under construction at each of the deployed intercontinental ballistic missile (ICBM) complexes where the SS-11 Mod 2/3, SS-17, -18, and -19 are currently being deployed. These buildings are believed to handle multiple-warhead reentry vehicles for the ICBMs. 25X1

10. If this correlation is correct for this building, it would suggest that the facility will be associated with the SS-X-16 or a follow-on system. The SS-X-16 has the capability to deliver a multiple reentry vehicle.

11. A fence separating this clerestory building and one of the three vehicle storage buildings (item 24) from the other buildings in this area was constructed [redacted] 25X1
[redacted] 25X1

12. Grading for a foundation for a new building (item 21, Figure 2) [redacted] 25X1
[redacted] 25X1

### Classroom and Housing Area

13. This area contains over 30 major buildings with the bulk of these being either classroom structures or barracks. Most of the buildings within this area were present in February 1966 when the Serpukhov facility was believed to have been an air force school.

14. There are a total of seven classroom buildings in the area. One of these (items 29 and 30, Figure 2) is a large five-story building, which was complete in July 1971. The west wing of another classroom building (item 28b) probably contains classrooms and a drive-in, high-bay shop and was not complete until July 1973.

15. Two of the apartment buildings have been constructed since 1966. One, a five-story building on the east-southeast side of the area (item 61), was complete by June 1975. The other apartment building (item 55) was complete by July 1976.

16. One of the nine barracks (item 56) was still under construction in July 1976. Additionally, a probable recreation building (item 54, Figure 2) was complete between April and July 1976. Two SS-11 canisters, which will probably be used for storage, were buried to the west of the wing of one of the classroom buildings (item 28b, Figure 2).

### Maintenance and Storage Area

17. In February 1966, only a firing range (item 13, Figure 2) and small general support-type buildings were observed in this area. Several additions were made to this area both before and after 1970. Two 14-bay vehicle storage buildings (items 1 and 2, Figure 2) were complete by November 1967. Both obstacle courses (item 14) were complete by November 1968. One of these courses is a typical SRF course; the specific association of the other cannot be identified.



[redacted] 25X1

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*Table 1. Buildings and Structures at Sirpukhov SSM Engineering Research/Training Facility*
*(Item numbers keyed to Figure 2)*

| Item | Description |
|---|---|
| | Maintenance and Storage Area |
| 1 | Veh stor bldg (14 bays) |
| 2 | Veh stor bldg (14 bays) |
| 3 | Maint bldg |
| | a |
| | b |
| 4 | Stor bldg |
| 5 | Maint bldg |
| 6 | Stor bldg |
| 7 | Veh maint garage |
| | a |
| | b |
| 8 | Veh stor bldg |
| | a |
| | b |
| 9 | Stor bldg |
| 10 | Stor bldg |
| | a |
| 11 | Stor bldg |
| 12 | SS-11 missile canisters (3) |
| 13 | Firing ranges (3) |
| 14 | Obstacle courses (2) |
| 15 | Driver-training course |
| 16 | Driver-training course control bldg |
| | a |
| | b |
| | Technical Training and Support Area |
| 17 | High-bay checkout bldg |
| | a |
| | b |
| 18 | Spt bldg |
| 19 | Prob receiving, inspection, and maint bldg (clerestory |
| | a |
| | b |
| | c |
| 20 | Veh storage bldg (14 bays) |
| 21 | Foundation |
| 22 | Type IIIE SS-13 training silo |
| 23 | Veh stor bldg (14 bays) |
| 24 | Veh stor bldg (14 bays) |

| Item | Description |
|---|---|
| 25 | Clerestory bldg |
| | a |
| | b |
| | c |
| | Classroom and Housing Area |
| 26 | Food stor bldg |
| 27 | SS-11 missile canisters being buried (2) |
| 28 | a Classroom bldg (2 stories) |
| | b Drive-in, high-bay shop |
| 29 | Classroom bldg (5 stories) |
| 30 | Classroom bldg (5 stories; east wing of Item 29) |
| 31 | Mealhall |
| 32 | Hq bldg (3 stories) |
| | a |
| | b |
| | c |
| | d |
| 33 | Spt bldg |
| 34 | Bks (1 story) |
| | a |
| | b |
| | c |
| | d |
| 35 | Shop bldg |
| | a |
| | b |
| 36 | Spt bldg (2 stories) |
| 37 | Bks (1 stories) |
| 38 | Bks |
| 39 | Bks |
| 40 | Bks (2 stories) |
| 41 | Bks |
| 42 | Classroom bldg (3 stories) |
| 43 | a POL stor tank |
| | b POL stor tank |
| | c Spt bldg |

| Item | Description |
|---|---|
| 44 | Heating plant |
| | a |
| | b |
| 45 | Firehouse |
| 46 | School/classroom bldg (3 stories) |
| | a |
| | b |
| | c |
| 47 | Classroom bldg (4 stories) |
| | a |
| | b |
| | c |
| | d |
| 48 | Food stor bldg |
| 49 | Food stor bldg |
| 50 | Bks (2 stories) |
| | a |
| | b |
| | c |
| | d |
| 51 | Classroom bldg (3 stories) |
| 52 | Prob cultural/social center (2 stories) |
| | a |
| | b |
| 53 | Athletic field |
| 54 | Prob recreation bldg |
| | a |
| | b |
| 55 | Apt bldg |
| 56 | Bks ucon |
| 57 | Amphitheatre |
| 58 | Bks (3 stories) |
| 59 | Spt bldg (2 stories) |
| 60 | Food stor bldg |
| 61 | Apt bldg (5 stories) |
| 62 | Bldg ucon |
| 63 | Bldg ucon |
| 64 | Security bldgs (2) |
| 65 | Classroom bldg |

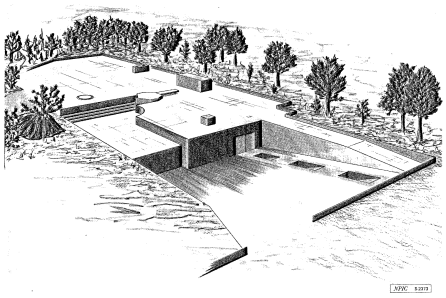

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*FIGURE 3. TYPE IIIE TRAINING SILO (ITEM 22, FIGURE 2)*

18. The vehicle maintenance garage (item 7, Figure 2) was complete by May 1970. Two small-arms firing ranges (item 13) were added to the rifle range by March 1971, and the driver-training course was constructed by July 1973.

### Training Activity

#### Technical Training and Support Area

19. The first significant missile-associated activity observed at the Serpukhov facility was a warhead mating/training exercise seen [redacted] This exercise involved a type II warhead transporter and was seen again [redacted] On both dates, a large security screen had been erected on the south side of the training silo.

20. [redacted] an SS-13 silo loader and a probable checkout van were involved in an exercise at the silo (Figure 4). The silo loader was aligned with and backed up to the open silo. The van was parked at the silo perpendicular to the silo loader. A pluglike object was at the top of the silo on both dates. The van was also at the silo [redacted], but the silo loader was not present. Additionally, a type II warhead transporter was parked on the apron in front of the high-bay checkout building (item 17, Figure 2) [redacted]

#### Maintenance and Storage Area

21. An SS-11 missile transporter with a prime mover was near the east end of the area on [redacted] Subsequently, [redacted] three SS-11 missile canisters (item 12, Figure 2) were seen near the firing range. These canisters will probably be used for storage or as personnel shelters. They have been seen in one or both of these functions at numerous facilities within the Soviet Union.

REFERENCES

[redacted]

**MAPS OR CHARTS**

SAC. US Air Target Chart, Series 200, Sheet 0167-10, scale 1:200,000

**REQUIREMENT**

Project 143451NC

[redacted]

[redacted]

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